

PATENT

AMENDMENTS TO THE CLAIMS

Claims 1-14 (Cancelled.)

15. (Previously Amended) A method of forming a semiconductor circuit in a semiconductor material having a first region of a first conductivity type, a second region of a second conductivity type, and a third region of the second conductivity type, the method comprising the steps of:

implanting a first dopant into the first region and the second region; and
implanting a second dopant into the second region and the third region.

16. (Previously Amended) The method of claim 15 and further comprising the steps of:

forming a layer of first oxide on the first region;

forming a layer of second oxide on the second region and the third region, a thickness of the layer of first oxide being greater than a thickness of the layer of second oxide.

17. (Previously Amended) The method of claim 16 and further comprising the steps of:

forming spaced apart first source and drain regions of the second conductivity type in the first region;

forming spaced apart second source and drain regions of the first conductivity type in the second region; and

forming spaced apart third source and drain regions of the first conductivity type in the third region.

PATENT

18. (Previously Amended) The method of claim 17 wherein:
the semiconductor material further includes a fourth region of the first
conductivity type, and
the second implanting step includes the steps of:
implanting a dopant into the second region and the third region; and
implanting a dopant into the second region, the third region, and the fourth
region.

19. (Previously Added) The method of claim 18 and further comprising the
step of forming spaced apart fourth source and drain regions of the second
conductivity type in the fourth region.

20. (Previously Added) The method of claim 17 wherein:
the semiconductor material further includes a fourth region of the first
conductivity type, and a fifth region of the first conductivity type, and
the second implanting step includes the steps of:
implanting a dopant into the second region, the third region, and the fourth
region; and
implanting a dopant into the second region, the third region, the fourth
region, and the fifth region.

21. (Previously Added) The method of claim 15 wherein the first dopant
and the second dopant have a same conductivity type.

22. (Previously Added) The method of claim 17 wherein the first dopant
and the second dopant have a same conductivity type.

PATENT

23. (Previously Added) The method of claim 16 and further comprising the steps of:

forming a layer of polysilicon on the layer of second oxide; and

etching the layer of polysilicon to form a first gate over the second region and a second gate over the third region, the first gate having a length that is 0.3-0.8 as long as a length of the second gate.

24. (Previously Added) The method of claim 16 wherein:

the semiconductor material further includes a fourth region of the first conductivity type,

the fourth region is implanted when the first region is implanted;

the layer of first gate oxide lies over a portion of the fourth region; and

a layer of third gate oxide lies over a portion of the fourth region, the layer of third gate oxide being thinner than the layer of first gate oxide.

25. (Previously Added) The method of claim 24 wherein:

the semiconductor material further includes a fifth region of the first conductivity type, a sixth region of the first conductivity type, and a seventh region of the second conductivity type,

the second implanting step includes the steps of:

implanting a dopant into the second region, the third region, and the fifth region; and

implanting a dopant into the second region, the third region, the fifth region, the sixth region, and the seventh region.

26. (Previously Added) The method of claim 16 wherein:

the semiconductor material further includes a fourth region of the first conductivity type; and

the fourth region is implanted when the second region and the third region are implanted at a same time.